INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

G.631

TRANSMISSION MEDIA CHARACTERISTICS

TYPES OF SUBMARINE CABLE TO BE USED FOR SYSTEMS WITH LINE FREQUENCIES OF LESS THAN ABOUT 45 MHz

ITU-T Recommendation G.631

(Extract from the *Blue Book*)

NOTES

1 ITU-T Recommendation G.631 was published in Fascicle III.3 of the *Blue Book*. This file is an extract from the *Blue Book*. While the presentation and layout of the text might be slightly different from the *Blue Book* version, the contents of the file are identical to the *Blue Book* version and copyright conditions remain unchanged (see below).

2 In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

Recommendation G.631

TYPES OF SUBMARINE CABLE TO BE USED FOR SYSTEMS WITH LINE FREQUENCIES OF LESS THAN ABOUT 45 MHz

(Geneva, 1976)

The CCITT,

recognizing

that the special complications of cable repair in the case of submarine cable systems laid in deep water (i.e. at depths where there is no need to use armoured cables) justify measures which would reduce the number of cable types with which repair ships have to deal;

appreciating

at the same time that system designers require flexibility in the choice of cables in order to optimize the overall cost per unit length of individual systems;

recognizing

that the most significant cable characteristics in determining whether any two cables may be joined together are:

- the inner diameter of the outer conductor,
- the characteristic impedance of the cable,

recommends

that for submarine systems handling line frequencies up to 45 MHz the cable used in the deep water sections of such systems should conform with the limits set out in Table 1/G.631.

TABLE 1/G.631

Inner diameter of outer conductor	25.0-25.5 mm	37.0-38.5 mm	43.2 mm
Characteristic impedance	43-46 Ω	a) 53-54 Ω b) 60-62 Ω	a) 49-50 Ω b) 53-54 Ω c) 60-62 Ω